

Notice of Allowability**Application No.**

10/521,135

Applicant(s)

VAARTJES ET AL.

Examiner

Hana A. Sanei

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to an Amendment filed on 9/14/06.
2. ☒ The allowed claim(s) is/are 1-19, 21-34.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

Response to Amendment

The Amendment, filed on 9/14/06, has been entered and acknowledged by the Examiner.

Claims 1-19, 21-34 are pending in the instant application

Examiner's Amendment

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with John C. Fox on 11/6/06.

In the claims:

In Claim 1, line 6 delete "such as Xe".

In Claim 14, line 6 delete "such as Xe".

In Claim 15, line 6 delete "such as Xe".

In Claim 16, line 6 delete "such as Xe".

Allowable Subject Matter

A. Claims 1-13, 17-19, 21-28 are allowed over the prior art of record.

The following is an examiner's statement of reasons for allowance:

The prior art of record teaches a metal halide lamp comprising a substantially cylindrical discharge vessel having an internal diameter $Di < 2.0$ mm and filled with an ionizable filling, wherein two electrodes are present at a mutual distance EA for

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maintaining a discharge in the discharge vessel, wherein the filling comprises an inert gas having a pressure at room temperature between 5 and 25 bar, and an ionizable salt. However, the prior art of record neither shows nor suggests the ionizable salt being selected from the group comprising PrI.sub.3, NdI.sub.3 and LuI.sub.3 as set forth in Claim 1.

Claims 2-13, 17-19, 21-28 are allowable because of their dependency status from claim 1.

B. Claims 14, 29-30 are allowed over the prior art of record.

The following is an examiner's statement of reasons for allowance:

The prior art of record teaches a metal halide lamp comprising a substantially cylindrical discharge vessel having an internal diameter $Di < 2.0$ mm and filled with an ionizable filling, wherein two electrodes are present at a mutual distance EA for maintaining a discharge in the discharge vessel, wherein the filling comprises an inert gas having a pressure at room temperature between 5 and 25 bar, and an ionizable salt. However, the prior art of record neither shows nor suggests that the ionizable salt being selected from the group comprising PrI.sub.3, NdI.sub.3 and LuI.sub.3, wherein NdI₃ in the discharge vessel is between 8 and 301 $\mu\text{mol}/\text{cm}^3$ as set forth in Claim 14.

Claims 29-30 are allowable because of their dependency status from claim 14.

C. Claims 15, 31-32 are allowed over the prior art of record.

The following is an examiner's statement of reasons for allowance:

The prior art of record teaches a metal halide lamp comprising a substantially cylindrical discharge vessel having an internal diameter $Di < 2.0$ mm and filled with an

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ionizable filling, wherein two electrodes are present at a mutual distance EA for maintaining a discharge in the discharge vessel, wherein the filling comprises an inert gas having a pressure at room temperature between 5 and 25 bar, and an ionizable salt. However, the prior art of record neither shows nor suggests that the ionizable salt being selected from the group comprising PrI.sub.3, NdI.sub.3 and LuI.sub.3, wherein a molar ratio of $\text{NaI}/(\text{PrI}_3 + \text{NdI}_3 + \text{LuI}_3)$ between 1.0 and 3.2 as set forth in Claim 15.

Claims 31-32 are allowable because of their dependency status from claim 15.

D. Claims 16, 33-34 are allowed over the prior art of record.

The following is an examiner's statement of reasons for allowance:

The prior art of record teaches a metal halide lamp comprising a substantially cylindrical discharge vessel having an internal diameter $D_i < 2.0$ mm and filled with an ionizable filling, wherein two electrodes are present at a mutual distance EA for maintaining a discharge in the discharge vessel, wherein the filling comprises an inert gas having a pressure at room temperature between 5 and 25 bar, and an ionizable salt. However, the prior art of record neither shows nor suggests that the ionizable salt being selected from the group comprising PrI.sub.3, NdI.sub.3 and LuI.sub.3, wherein an amount of LuI_3 between 15 and 414 $\mu\text{mol}/\text{cm}^3$ as set forth in Claim 16.

Claims 33-34 are allowable because of their dependency status from claim 16.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hana A. Sanei whose telephone number is (571) 272-8654. The examiner can normally be reached on Monday- Friday, 9 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Examiner
Hana A. Sanei



Joseph Williams
Primary Examiner